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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,228	09/28/2001	Horacio E. Franco	SRI/4580-2	7137

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EXAMINER

MCFADDEN, SUSAN IRIS

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/967,228	<b>Applicant(s)</b> FRANCO ET AL.	
	<b>Examiner</b> Susan McFadden	<b>Art Unit</b> 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3,4,5,6,7,8,10,11, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bellegarda (5,839,106).

In regard to claims 1,3,4,5,6,7,8,10,11, and 17, Bellegarda show in Figs. 2 and 3a, a speech recognition system and method comprising: acquiring a speech signal that represents an utterance (item 130), which can be a location or address, performing a first recognition pass by applying a first language model to the speech signal (item 310), selecting or generating a second language model based at least in part on results from the first recognition pass (Type A scores), wherein the first and second language models are statistical language models (Abstract) which are constrained based on a result of the previous recognition pass (col. 6, ln 35-50) the, on information regarding a linguistic structure of a domain within the speech signal, and on information regarding relationships among the domain components, objects or concepts within the speech

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signal; and performing a second recognition pass by applying the second language model to at least a portion of the speech signal to recognize the utterance containing the speech signal (item 320).

In regard to claim 9, Bellegarda show in Figs. 2 and 3a, a speech recognition system and method comprising: generating or acquiring a database, obtaining information regarding the linguistic structure of the domain and information regarding relationships among the domain components, objects or concepts (Fig. 2, item 180, lexicon); acquiring a result from a speech recognition pass, the result including a domain component, object or concept; and generating a language model that includes a subset of the domain by using the result from the speech recognition pass to select information from the database (Fig. 3A).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellegarda (cited above).

6. In regard to claim 2, Bellegarda show the speech recognition system discussed above. Bellegarda do not specifically show that finite state grammars are used for the language models. The Examiner takes Official Notice that language models can be determined by the designer depending on the constraints he would like. Therefore, it

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would be obvious to one of ordinary skill in the art at the time of the invention to add this feature because it provides the system with increased accuracy.

In regard to claim 12, Bellegarda show the speech recognition system discussed above. Bellegarda do not specifically show that each address or location has a plurality of components. The Examiner takes Official Notice that address or locations can have a plurality of components. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to add this feature because it provides the system with increased accuracy.

In regard to claim 13, Bellegarda shows that the first recognition pass processes the speech signal using a first language model (Fig. 3A, item 310).

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellegarda (cited above) in view of Digalakis et al. (5,825,978).

In regard to claims 14 and 15, Bellegarda shows the speech recognition system discussed above. Bellegarda do not specifically show that the language model can recognize a subset of the location or address components. Digalakis et al. show a speech recognizer in which a subset of the components can be recognized (claims 8 and 16). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to add this feature because it provides the system with increased accuracy and low overhead (Abstract).

In regard to claim 16, Bellegarda shows that the second and subsequent language models are selected or generated by using the result from a previous

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recognition pass to perform a search on a database that constrains information regarding relationships among the address or location components (Fig. 3A, item 320).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan McFadden whose telephone number is 703-308-6693. The examiner can normally be reached on Monday-Friday, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan McFadden  
Primary Examiner  
Art Unit 2655

November 18, 2004